

REMARKS/ARGUMENTS

Claims 1, 2, 7, 9-14, 21, 24 and 25-33 were previously pending. No claims have been amended, canceled, or added. Thus, claims 1, 2, 7, 9-21, 24-33 remain pending and subject to Examination.

Applicants respectfully request reconsideration of this application based on the following remarks.

Examiner Interview

Applicants would like to thank Examiner Daniel and Supervisory Patent Examiner Appiah for extending the courtesy of a personal interview to Applicants' representative on March 17, 2010. During the interview, Applicants' representative Demetria Buncum explained the deficiencies of the Bamburak and Cuffaro references with respect to the pending claims. Examiner Appiah agreed that there appeared to be distinctions between the pending claims and the cited references, including the claimed feature of generating a priority data summary table in the mobile station using priority criteria determined from the system priority data table, and requested that Applicants file a response setting forth these distinctions.

Preliminary Remarks

Applicants have previously provided detailed explanations as to how the pending claims are distinguishable over the cited references. In response thereto, the Office Actions have repeatedly indicated that the "applied reference(s) provide more than adequate support" without specifically addressing the substance of Applicants arguments. MPEP § 707.07(f) recites, in pertinent part, that when "the applicant traverses any rejection, the examiner should, if he or she repeats the rejection, take note of the applicant's argument and **answer the substance of it.**" (**Emphasis Added**). Applicants respectfully request that any subsequent Office Actions address and answer the substance of all arguments set forth below.

Claim Rejections – 35 USC § 103

Claims 1-2, 7, 9-15, 17-21 and 24-33 are rejected under 35 USC § 103(a) as being obvious over Bamburak et al. (US Patent Publication No. 2005/0113089) in view of Cuffaro et al. (US Patent No. 6,587,686). Applicants respectfully traverse this rejection.

Claim 1 is directed to a method of selecting a desirable system from a list of wireless communications systems stored in a mobile station comprising the following steps:

maintaining, in the mobile station, a system priority data table based on acquisition/registration attempts by the mobile station with wireless communication systems, the system priority data table including a plurality of entries, each entry representing a single system acquisition/registration attempt by the mobile station and including a signal acquisition identifier, a power measurement, a system access identifier, and a system lost identifier;

generating a priority data summary table in the mobile station using priority criteria determined from the system priority data table, the priority data summary table including an acquisition success rate field, a last power measurement field, an access success rate field, and a system lost rate field;

predicting whether a future system acquisition/requisition attempt on a selected wireless communications system is likely to be successful based on the priority data summary table;

predicting whether the selected wireless communications system is likely to be useable if the future system acquisition/registration attempt is successful based on the priority data summary table;

selecting, by the mobile station, a group of wireless communications systems from the list of wireless communications systems stored in the mobile station in accordance with a predetermined system selection procedure, the group of wireless communications systems having a first system acquisition order;

reprioritizing, by the mobile station, the group of wireless communications systems in accordance with the priority data summary table, the reprioritized group of wireless communications systems having a second system acquisition order based upon the likelihood of system acquisition/registration and the likelihood of usability; and

attempting, by the mobile station, to acquire a desirable system based on the reprioritized group of wireless communications systems.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to

combine reference teachings. Second, there must be a reasonable expectation of success. Finally, obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. Often, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this analysis should be made explicit.¹

Applicants respectfully submit that the Office Action has failed to set forth a *prima facie* case of obviousness as none of the cited references, alone or in combination with each other, disclose or even suggest each and every feature recited in claim 1.

The Cited References Fail to Disclose or Suggest the Maintaining and Generating Steps as Set Forth in Claim 1

Neither Bamburak nor Cuffaro disclose or suggest maintaining a system priority data table having the features explicitly recited in claim 1. The Office Action asserts, on page 5 of the outstanding Office Action, that "a table stored in memory (16) includes a counter value of success rate (see page 5, [0036, lines 1-7]; Figs. 9-10), and the counter value for a frequency is incremented each time the mobile communication device (10) acquires the frequency (see pg. 5, [0035, lines 1-7]), and the counter value alters the order of the frequencies (see pg. 5, [0035, lines 11-13; 0036, lines 7-11]), where a success rate (e.g., combination of success and failure) of a frequency can alter over time which implies that a non-zero counter value can be decremented to a zero counter value (e.g., undesirable, failed, or lost) to arrange frequencies from highest to lowest as evidenced by the fact that one of ordinary skill in the art would clearly recognize."

¹ *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992); *In re Vaack*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991); *KSR International Co., v. Teleflex Inc.*, No. 04-1350, (US, April 30, 2007).

Applicants respectfully disagree.

As Applicants have repeatedly explained in prior responses, the method of claim 1 recites two tables -- a system priority data table and a priority data summary table - where one table, the priority data summary table, is generated using priority criteria determined from the other table, the system priority data table. As explicitly recited in the claim, the first table, i.e. the system priority data table, includes a plurality of entries, each of which represents a single system acquisition/registration attempt. Each entry includes a signal acquisition identifier, a power measurement, a system access identifier, and a system lost identifier. Priority criteria, including acquisition success rates, access success rates, and system lost rates are calculated from the system priority data, and used to generate and store the second table, i.e. the priority data summary table. The priority data summary table includes an acquisition success rate field, a last power measurement field, an access success rate field, and a system lost rate field. Neither Bamburak nor Cuffaro, alone or in combination with each other, disclose or suggest at least this combination of features.

Bamburak does not disclose a system priority data table and a priority data summary table as recited in the pending claims. Bamburak does disclose two tables which are stored in memory at a mobile communication device. However, these tables are very different from the tables recited in the pending claims. As depicted in Figure 9 of Bamburak and described in paragraphs [0035] -- [0038], a table may be stored in memory that provides a counter associated with each frequency band in a master search schedule. As shown in Figure 9, the table includes three fields -- a priority field, a frequency band field, and a counter field. Thus, clearly, the table depicted in Figure 9 is not a system priority data table including a plurality of entries, each of which has a signal acquisition identifier, a power measurement, a system access identifier, and a system lost identifier. Nor is the table depicted in Figure 9 a priority data summary table including an acquisition success rate field, a last power measurement field, an access success rate field, and a system lost rate field.

As explained in paragraph [0035] of Bamburak, each time the mobile communication device acquires service from a preferred provided, the counter value associated with the frequency band is incremented to establish a personal roaming history for the user. Thus, not

only does the table depicted in Figure 9 lack the fields explicitly set forth in the pending claims, the table **does not** include a plurality of entries each representing a single system acquisition/registration attempt by the mobile station. Rather, a counter is associated with each frequency band, and each time the mobile station acquires service from a provider associated with the frequency band, the counter is incremented. Thus, at best, the table depicted in Figure 9 keeps a cumulative record of acquisitions at each frequency band. **Separate entries representing each single acquisition/registration attempt are not disclosed or even suggested** by Bamburak.

The Office Action argues that, in reference to Bamburak, “a success rate (e.g., combination of success and failure) of a frequency can alter over time which implies that a non-zero counter value can be decremented to a zero counter value (e.g., undesirable, failed, or lost) to arrange frequencies from highest to lowest as evidenced by the fact that one of ordinary skill in the art would clearly recognize.” However, as explicitly recited in Bamburak, “the counter value associated with the frequency band is incremented thereby retaining information establishing a ‘personal roaming history’ for the user.” In Bamburak, **the counter indicates how many times a user has accessed a preferred network within a frequency band**. As such, **there would be no suggestion or motivation to decrement this counter**, as alleged by the Office Action.

Applicants note that simply stating that “one of ordinary skill in the art would clearly recognize” is not a proper basis for making an obviousness rejection. While obviousness can be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some rational reason to do so, see *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741 (2007), obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention *absent some teaching, suggestion or incentive* supporting the combination. *ACS Hospital Systems Inc. v. Montefiore Hospital*, 732 F. 2d 1572, 1577, 221 U.S.P.Q. 929, 933 (Fed. Cir., 1984). Cited in *In re Geiger*, 815 F.2d at 688, 2 U.S.P.Q.2d at 1268 (Fed. Cir. 1987) (Emphasis added). See also *In re Lee*, (61 U.S.P.Q. 2d 1430, 277 F.3d 1338 (CAFC, 2002)). Moreover, obviousness cannot be established by combining references without also providing objective evidence of the motivating force that would impel one skilled in the art to do what the patent Appellant has done (See *In Re Lee, infra*;

see also *Ex Parte Levensgood*, 28 U.S.P.Q.2d 1300, 1302 (Bd. Pat. App. & Inter. 1993)). Additionally, as recited in MPEP § 2142, the “proper analysis is whether the claimed invention would have been obvious to one of ordinary skill in the art after consideration of all the facts.” Applicants respectfully submit that contrary to the assertions in the Office Action, decrementing the counter to a zero counter value would not have been obvious in view of the facts.

Here, the claimed subject matter includes a system priority data table having a plurality of entries, each entry representing a single system acquisition/registration attempt by the mobile station. The facts are that Bamburak does not disclose this feature, but discloses a counter used to maintain a personal roaming history by incrementing the timer each time a user access a preferred network. Given these facts, one of ordinary skill in the art would not have recognized that the counter, which is used to determine how many times an event occurs, could also be decremented, as the purpose of the counter is to keep track of the number of accesses. Thus, it appears the Office Action is using hindsight, which is improper.

Bamburak’s second table, as depicted in Figure 10, includes fields for priority, system operator code (SOC), and system identifier code (SIC). Each SOC may have associated therewith a plurality of SICs (*see, e.g.*, paragraph [0008] of Bamburak). Thus, like the table depicted in Figure 9, the table depicted in Figure 10 is not a system priority data table including a plurality of entries, each of which has field for a signal acquisition identifier, a power measurement, a system access identifier, and a system lost identifier or a priority data summary table including an acquisition success rate field, a last power measurement field, an access success rate field, and a system lost rate field.

Bamburak also fails to disclose or suggest that one of the tables depicted in Figure 9 or Figure 10 is generated using priority criteria determined from the other table. As explained in paragraph [0036] of Bamburak, the table depicted in Figure 9 is a table providing a counter associated with each frequency band in the master search schedule. “Based upon the counter values in the table, the frequency band with the highest registration success rate as defined by its associated counter value would follow the home frequency band in the master search schedule.” The table depicted in Figure 10 is a table that defines the optimal service provider’s SOC and SIDS, and preferred service provider’s SOC and SIDS. *See*, paragraph [0039] of Bamburak.

“The table in FIG. 10 may be programmed by the manufacturer, by the distributor when the phone is purchased, or by the user. It is also possible to program the table of FIG. 10 over the air” Not only are the tables defined in Bamburak completely different from the two tables recited in claim 1, Bamburak also fails to disclose or suggest that one table is generated from the other.

Though the Office Action first asserts that Bamburak discloses tables including the features described above (*see, e.g.*, pages 4-6 of the Office Action), it appears that the Office Action does recognize at least some of the deficiencies of Bamburak by stating that Bamburak “inexplicitly” discloses the features of “a system lost identifier; and priority data summary table including a system lost rate field.” The Office Action concludes that such features are well known in the art, and relies on Cuffaro to support this conclusion. Applicants again respectfully disagree.

It is noted that Cuffaro is not concerned with selecting a desirable system from a list of wireless communications systems. Rather, Cuffaro is directed to a method of detecting base station transceiver malfunctions in a cellular telecommunications system (*see, e.g.*, Abstract of Cuffaro). Nonetheless, Cuffaro does not disclose or suggest a priority data summary table including an acquisition success rate field, a last power measurement field, and an access success rate field, as asserted on pages 8-9 of the Office Action. The Office Action equates the call accessibility data recited in Cuffaro with both the acquisition success rate field and the access success rate fields recited in the pending claims. However, as explicitly set forth in the claims, these are two separate fields.

Moreover, as explained in Applicants’ previous response, with regard to call accessibility data, Cuffaro refers only to call setup failure rate and call setup time (*see*, col. 5, lines 50 – 51). Cuffaro does not disclose or suggest an acquisition success rate field (*e.g.*, a field indicating the rate of successful acquisition of a system) or an access success rate field (*e.g.*, a field indicating the rate of access success of a system). Acquisition and access are two separate and distinct processes. Cuffaro does not disclose or suggest a priority summary table which includes a field indicating a rate of acquisition success and a field indicating a rate of access success.

Additionally, Cuffaro fails to disclose that the mobile station maintains the TMD database 25a, which the Office Action equates with the claimed priority data summary table. As recited in column 1, lines 27-29 of Cuffaro, “[e]ach BS is responsible for the radio communications between the subscribers’ Mobile Stations (MS) and the cellular telecommunications network.” Thus, Cuffaro notes that the cellular telecommunications network is separate and distinct from the mobile station. As recited in column 5, lines 1-10 of Cuffaro, “[t]he TMD 25 may be stand-alone node within the cellular telecommunications network 10 as shown in FIG. 2, or may be a logic entity within the MSC 22, or within any other node of the cellular telecommunications network 10.” Thus, Cuffaro does not disclose or suggest that mobile station can maintain the TMD 25. It is noted that the function of the TMD is to store and process the measurements and parameters generated by the BS transceivers to detect possible malfunctions of particular transceivers. As such, there is no suggestion that the mobile station would be capable of storing this information.

The Cited References Fail to Disclose Predicting Whether a Future System Acquisition/Registration Attempt is Likely to Be Successful Based on the Priority Data Summary Table and Predicting Whether the Selected Wireless Communications System is Likely to be Useable if the Future System Acquisition/Registration Attempt is Successful

On page 7, the Office Action cites paragraphs 26-27 and Figures 6-10 of Bamburak as allegedly disclosing the predicting features. The Office Action further asserts that “the mobile station include s master search schedule in which preferred service provider lists are optimized from the master search schedule (see pg. 5, [0034-0039]; pg. 3, [0028, lines 10-12]; pg. 4, [0029, lines 94-97]; pgs. 5-6, [0032, lines 1-33]; pgs. 2-3, [0026-0027]; Figs. 7-10), and where the system prioritizes the frequencies with a success rate by a counter to monitor which system and frequency is acquired and/or lost in order to prioritize a table (see pg. 3, [0027, lines 7-11], [0028, lines 10-12]; pgs. 3-4, [0029, lines 13-14, 94-100]; pg. 4, [0032, lines 1-2,14-15]; pgs. 56, [0034-0039]; Figs. 8-10).” Bamburak describes a master search schedule that is used to initialize search schedules used when finding a desirable service provider. However, Bamburak does not disclose or suggest using the master search schedule to predict whether an acquisition/registration attempt is likely to be successful and predicting whether a wireless communications system is likely to be useable if the acquisition/registration attempt is

successful, and then using these predictions to reprioritize a group of wireless communications systems. In fact, Bamburak says nothing about usability.

Cuffaro does not overcome these deficiencies. Cuffaro is directed to detecting base station transceiver malfunctions. Base stations transceivers individually calculate performance levels based on a various factors. These performance levels are used to indicate whether a malfunction has occurred. However, like Bamburak, Cuffaro also fails to disclose or suggest predicting whether an acquisition/registration attempt is likely to be successful and predicting whether a wireless communications system is likely to be useable, and then using these predictions to reprioritize a group of wireless communications systems.

Based on the foregoing, it is clear that the Office Action has failed to set forth a *prima facie* case of obviousness as the cited references do not even disclose or suggest each and every feature of claim 1. Independent claims 15 and 21 include similar recitations to those described above in reference to claim 1. Thus, claims 15 and 21 are also patentable over the cited references. Additionally, all of the dependent claims are patentable over the cited references at least by virtue of their dependence on a patentable independent claim in addition to the individual features each claim recites. Further, each of these dependent claims separately recites a combination of subject matter that is not disclosed or suggested by the cited prior art.

Therefore, based on the foregoing, Applicants respectfully request the withdrawal of the rejection of claims 1, 2, 7, 9 -- 15, 17 -- 21, and 24 - 33 under 35 USC § 103(a) as being obvious over Bamburak in view of Cuffaro.

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CONCLUSION

In light of these remarks, Applicants submit that the application is in condition for allowance, for which early action is requested.

Please charge any fees or overpayments that may be due with this response to Deposit Account No. 17-0026.

Respectfully submitted,

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